FRZ-108US

Appln. No.: 10/570,934

Amendment Dated December 29, 2006 Reply to Office Action of October 2, 2006

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1.-8. (Cancelled)

9. (New) A Step up switching converter for converting a DC input voltage into a DC output voltage the converter comprising:

a first semiconductor switch arranged in a series connection with a storage inductor and a sensor resistor,

a control electrode of said first semiconductor switch being connected via a first resistor to said input voltage, said first resistor constituting the operating resistor of a second semiconductor switch,

a voltage drop of said sensor resistor is fed to a control electrode of said second semiconductor switch as an indicator of current through said storage inductor, and

a connection of said storage inductor connected to said first semiconductor switch being connected on the one hand via a rectifier diode to an output capacitor which carries the output voltage and on the other hand via a series RC element to the control input of said second semiconductor switch.

- 10. (New) The step up converter in accordance with claim 9, wherein the voltage drop across the sensor resistor is fed to the control electrode of the second semiconductor switch via a second resistor.
- 11. (New) The step up converter in accordance with claim 9, wherein in order to control the output voltage a switching path of a third semiconductor switch, whose control input is connected to the output voltage via a Zener diode, lies in parallel to a switching path of the second semiconductor switch.
- 12. (New) The step up converter in accordance with claim 10, wherein in order to control the output voltage a switching path of a third semiconductor switch, whose control input is connected to the output voltage via a Zener diode, lies in parallel to the switching path of the second semiconductor switch.